

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently Amended)** A method of producing inspection data for inspecting a parts-mounted board by image processing, comprising:

reading inspection data corresponding to each part on a board constituting an object of inspection from a parts library produced in advance;

setting the inspection data at ~~the~~ a mounting position of the part;

detecting an image area corresponding to each land on an image picked up from a model of the board constituting the object of inspection; and

based on the detection result, automatically correcting the set data for setting an inspection window included in the read inspection data, when the inspection window is displaced with respect to the image area corresponding to each land, so that the inspection window is adapted for inspection of the board,

wherein the inspection window is adapted due to a design rule change for one or more of the parts mounted on the board.

2. **(Previously Presented)** An inspection data producing method according to claim 1,

wherein the step of detecting the image area corresponding to the land comprises:

retrieving the position of the land edges with reference to a solder inspection window based on the set data before correction on the image of the model.

3. **(Previously Presented)** An inspection data producing method according to claim 1,

wherein, in accordance with the correction of the set data of the inspection window, inspection reference data corresponding to the inspection window is corrected.

4. **(Previously Presented)** An inspection data producing method according to claim 1,

wherein, using the corrected inspection data for a predetermined part on the board, inspection data for parts of the same type as the predetermined part is corrected.

5. **(Previously Presented)** An inspection data producing method according to claim 1,

wherein the inspection data shared by the parts is produced using the inspection data corrected for the same type of parts on the board, and the inspection data for each part in rewritten into the common inspection data.

6. **(Previously Presented)** An inspection data producing method according to claim 1,

further comprising the step of:

rewriting the parts library or producing a new parts library for a predetermined part using the corrected inspection data.

7. **(Currently Amended)** A board inspection apparatus comprising:

image input means for inputting an image picked up of a board;

data file producing means for producing an inspection data file required for inspection of a board to be inspected, by reading the inspection data corresponding to each part from a parts library and setting the inspection data on a mounting position of the part;

land inspection means for receiving an input model image of a corresponding board after complete production of the inspection data file and detecting an image area corresponding to a land on the image;

correcting means for automatically correcting the set data for setting an inspection window included in the read inspection data based on the detected image area, when the inspection window is displaced with respect to the image area corresponding to each land, so that the inspection window is adapted for inspection of the board to be inspected; and

registration means for registering, in a memory, the inspection data file including the corrected set data,

wherein the inspection window is adapted due to a design rule change for one or more of the parts mounted on the board.

8. **(Previously Presented)** A board inspecting apparatus according to claim 7, wherein the memory corresponds to the parts library.

9. **(Previously Presented)** A board inspecting apparatus according to claim 7, wherein the inspection data includes luminance and brightness values of Red, Green and Blue light shined on the part when mounted on the board.

10. **(Previously Presented)** A board inspecting apparatus according to claim 7, wherein, when the inspection window has been corrected using an image of the board in which no parts are mounted thereon,

the image input means images a second board on which parts are mounted thereon,

wherein, based on the imaging of the second model of the board, the registration means only registers the inspection data file after making a determination that the corrected inspection data is proper.

11. **(Currently Amended)** A board inspecting apparatus according to claim 7, wherein the inspection window is corrected using the image picked up from ~~the model of~~ the a bare board on which no parts have been mounted.

12. **(Previously Presented)** An inspection data producing method according to claim 1, wherein the inspection data includes luminance and brightness values of Red, Green and Blue light shined on the part when mounted on the board.

13. **(Previously Presented)** An inspection data producing method according to claim 1, wherein, after the inspection window has been corrected using the image of the board in which no parts are mounted thereon, the method comprises:

imaging a second model of the board in which parts are mounted thereon; and

determining, based on the imaging of the second model of the board, whether the corrected inspection data is proper.

14. **(Previously Presented)** An inspection data producing method according to claim 1, wherein the inspection window is corrected using the image picked up from the model of the board on which no parts have been mounted.

15. **(Previously Presented)** An inspection data producing method according to claim 1, wherein the inspection data is automatically corrected when the image area

corresponds to each land on the model of the board has been either increased or decreased with respect to the read inspection data.

16. **(Previously Presented)** A board inspecting apparatus according to claim 7, wherein the inspection data file including the corrected set data is automatically corrected when the image area corresponds to each land on the board to be inspected has been either increased or decreased with respect to the read inspection data.

17. **(New)** A board inspecting apparatus according to claim 7, wherein the inspection data file comprises:

binary threshold values used for extracting the set position and size of the inspection window for each part mounted on the board;

color patterns of Red, Green and Blue with respect to the inspection window for each part mounted on the board; and

an inspection program used for the inspection window for each part mounted on the board.

18. **(New)** An inspection data producing method according to claim 1, wherein the inspection window includes a first inspection window that encompasses the part itself, a second inspection window that encompasses solder regions used to mount the part on the board, and a third inspection window that encompasses land regions where the part is mounted on the board, and a reference inspection window for the part that encompasses regions covered by the first, second and third inspection windows.

19. **(New)** An inspection data producing method according to claim 2, wherein left and right boundaries of the land edges are determined by using a histogram while projecting a plurality of binary images in a reference window on a first axis; and

wherein top and bottom boundaries of the land edges are determined by using the histogram while projecting a plurality of binary images in the reference window on a second axis orthogonal to the first axis.

20. **(New)** An inspection data producing method according to claim 1, further comprising:

storing, as a correction rule, a relationship between a fillet length for a part and a land size for a part; and

changing, based on the correction rule, a fillet length for the part at a slower rate than a land size for the part, when the design rule change occurs.